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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/976,265	10/15/2001	Torsten Lorenz	420/50498	1078
23911	7590	12/09/2003	EXAMINER	
CROWELL & MORING LLP INTELLECTUAL PROPERTY GROUP P.O. BOX 14300 WASHINGTON, DC 20044-4300			ROSSI, JESSICA	
			ART UNIT	PAPER NUMBER
			1733	

DATE MAILED: 12/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

## Application No.

09/976,265

## Applicant(s)

LORENZ ET AL.

## Examiner

Jessica L. Rossi

## Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 03 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☒ Interview Summary (PTO-413) Paper No(s). 11252003.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

**DETAILED ACTION**

***Response to Amendment***

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn - amended claim 7 is a combination restating all the limitations in claim 1 (now canceled) and previous claim 7; the Dyke reference (WO 01/96111) used to rejection claim 7 in the final office action had a filing date of 6/8/01 while the present application has an actual filing date of 10/15/01 and an effective filing date of 10/13/00; applicants filed translation of foreign priority document (attached to 11/03/03 arguments) to perfect the effective filing date and remove the '111 reference as prior art against the present claim.
2. This action is in response to the amendment dated 11/3/03. Claims 1-6, 8-9, 12-14, and 29-30 were canceled. Claim 7 is pending.
3. The rejection of claim 7 under 35 U.S.C. 112, second paragraph, as set forth in paragraph 4 of the previous office action, has been withdrawn in light of Applicants arguments dated 11/3/03.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Prevorsek et al. (US 5677029; of record) in view of Hartman et al. (US 5006293).

With respect to claim 7, Prevorsek is directed to making ballistic resistant fabric articles, such as body armor (abstract; column 1, line 10). The reference teaches alternately placing layers of cut dry fiber 14a-14e (column 5, line 42; column 3, lines 44-49) and thermosetting polymer layers 16a-16e (column 13, lines 1-2; column 14, line 25; column 3, lines 44-49) with predetermined shapes (column 12, lines 1-7) on top of each other to initially form a bonded fabric. The reference teaches molding the fabric and polymer layers by subjecting the same to heat and pressure (column 22, lines 1-6) wherein the skilled artisan would have readily appreciated that such would only be possible with the aid of some type of working surface.

The reference teaches the shapes of the polymer layers ensuring bonding in overlapping areas of inner cut semi-finished fabric layers and cut semi-finished fabric layers that form outer sides of the fabric article (Figure 4; column 12, lines 1-13; column 22, line 51 – column 23, line 5). The reference teaches providing local recesses (i.e. slits/perforations) in the polymer layers in order to maintain the flexibility of the article after bonding of the fabric and polymer layers (column 12, lines 58-63). It is noted that the present invention is also directed to making an article comprising alternating fiber and polymer layers wherein the polymer layers bond the fiber layers together and recesses are formed in the polymer layers (p. 9, [0022]); therefore the skilled artisan would have appreciated that the recesses of Prevorsek would also minimize shearing stress between the fabric layers during bonding/molding.

The reference teaches curing the composite formed by the fabric and polymer layers to form the finished article (column 13, lines 6-10; column 22, lines 1-6).

The reference is silent as to the working surface having a separating foil as a carrier for the fabric. It would have been obvious to provide the working surface with a release layer

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because such is known in the ballistic resistant article art, as taught by Hartman (column 8, lines 40-55), and this prevents the finished product from sticking to the surface thereby allowing for easy removal therefrom.

6. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Prevorsek et al. in view of Hartman et al., Harpell (US 5175040) and Sloman (EP 233700).

With respect to claim 7, Applicants are directed to paragraph 5 above for a complete discussion of Prevorsek and Hartman.

It is noted the examiner interpreted the reference to mean that the fabric layers were cut fabric layers. If such is not taken as the case, it is known in the ballistic resistant article art to provide a plurality of fabric/prepreg layers by cutting a continuous supply of fabric into discrete layers followed by stacking the discrete layers and molding them to form the preform, as taught by Harpell (column 1, lines 14-15; column 8, lines 28-30 and 48-66; column 9, lines 32-33).

Therefore, it would have been obvious to the skilled artisan at the time the invention was made to provide the fabric layers of Prevorsek by cutting a continuous supply of fabric because such is known in the art, as taught by Harpell, and this expedites the manufacturing process.

It is also noted that the examiner interpreted the Prevorsek reference to mean that molding of the fabric and polymer layers takes place on some type of working surface. If this is not the case, it would have been obvious to use a working surface because such is known in the ballistic resistant article art, as taught by both the prior art referred to by Sloman (p. 3, lines 27-29) and Hartman (column 8, lines 40-56), wherein this allows for shaping of the layers into a desired configuration during the curing step.

### ***Double Patenting***

7. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

8. Claim 7 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 15-23 and 26-30 of copending Application No. 10/373,107. Although the conflicting claims are not identical, they are not patentably distinct from each other because the article claimed in the copending application could only be made using the claimed method of the present invention.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### ***Response to Arguments***

9. Applicant's arguments with respect to claim 7 and the WO /96111 reference were acknowledged in paragraph 1 above.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Jessica L. Rossi** whose telephone number is **703-305-5419** (571-

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272-1223 come mid December). The examiner can normally be reached on M-F (8:00-5:30)

First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard D. Crispino can be reached on 703-308-3853. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9310.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Jessica L. Rossi  
Patent Examiner  
Art Unit 1733

*JLR*

*Jeff H. Aftergut*  
JEFF H. AFTERGUT  
PRIMARY EXAMINE  
GROUP 1300